

BRUHAT BANGALORE MAHANAGARA PALIKE

Modified Schedule-B

Name of Work: Restoration and Improvement of Sainagara, Best Cont, Bharathnagar and Chandrappa Layout, Hill side meadows layout, subhash Chandra Bose layout and surrounding areas in ward no-03 of Yelahanka New Town Sub division (PACKAGE NO-14)

SI No	Description of Work	Unit	Quantity as per Estimate	Rates	
				in figures	In Words
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. i) Lime /Cement Concrete.II. By Mechanical Means. A. Cement Concrete Grade M-15 & M-20. MORTH Specification No. 202.including all lead and lift and as per the direction of Engineer in Charge	Cum	539.84	852.62	Rupees Eight Hundred Fifty Two And Paise Sixty Two Only
	Above 125%	Cum	1794.05	852.62	Rupees Eight Hundred Fifty Two And Paise Sixty Two Only
2	Earthwork excavation by manual means for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per the direction of Engineer in Charge	Cum	8427.31	217.43	Rupees Two Hundred Seventeen And Paise Forty Three Only
3	Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per the direction of Engineer in Charge	Cum	1698.19	5675.99	Rupees Five Thousand Six Hundred Seventy Five And Paise Ninety Nine Only
	Above 125%	Cum	821.93	5675.99	Rupees Five Thousand Six Hundred Seventy Five And Paise Ninety Nine Only

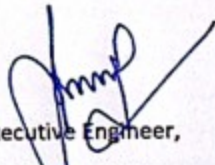
	Description of Work	Unit	Quantity as per Estimate	Rates	
				in figures	In Words
4	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specifications. including all lead and lift and as per the direction of Engineer in Charge	Cum	3001.43	7497.22	Rupees Seven Thousand Four Hundred Ninety Seven And Paise Twenty Two Only
5	Providing T.M.T. steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking, placing in position, lapping and/or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specification including all lead and lift and as per the direction of Engineer in Charge	Ton	182.26	80948.07	Rupees Eighty Thousand Nine Hundred Forty Eight And Paise Seven Only
6	Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per the direction of Engineer in Charge	Cum	71.10	6089.85	Rupees Six Thousand Eighty Nine And Paise Eighty Five Only
	Above 125%	Cum	75.53	6089.85	Rupees Six Thousand Eighty Nine And Paise Eighty Five Only
7	Providing and laying 100mm thick pre-cast cover slabs over drains of width not exceeding 800 mm using M20 concrete reinforced with steel @ 6.00 kg/Sqm, slabs jointed in CM 1:3 proportion and nicely finished including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including of labour, materials, HOM of machineries, curing, lead and lift charges etc, Complete as per MORTH specifications No. 1500, 1700 including all lead and lift and as per the direction of Engineer in Charge	Sqm	7353.50	1941.22	Rupees One Thousand Nine Hundred Forty One And Paise Twenty Two Only
8	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing including all lead and lift and as per the direction of Engineer in Charge	Sqm	515.76	4530.86	Rupees Four Thousand Five Hundred Thirty And Paise Eighty Six Only

	Description of Work	Unit	Quantity as per Estimate	Rates	
				in figures	In Words
9	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc., complete including all lead and lift and as per the direction of Engineer in Charge	Nos	16406.00	436.80	Rupees Four Hundred Thirty Six And Paise Eighty Only
10	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications including all lead and lift and as per the direction of Engineer in Charge	Sqm	2583.86	85.65	Rupees Eighty Five And Paise Sixty Five Only
11	Providing and laying heavy duty cobble stones interlock pavers, 60mm thick using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM complete as per specifications including all lead and lift and as per the direction of Engineer in Charge	Sqm	7521.88	1127.34	Rupees One Thousand One Hundred Twenty Seven And Paise Thirty Four Only
12	Excavation for roadwork in soil with hydraulic excavator of 09 cum bucket capacity including cutting and loading to tippers, transporting with a lead of 1.00 km and trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections complete as per the direction of Engineer in Charge	Cum	6901.00	64.58	Rupees Sixty Four And Paise Fifty Eight Only
13	Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occurring during rolling including cost of all labour, HOM complete as per specifications.	Sqm	21582.10	6.42	Rupees Six And Paise Forty Two Only
14	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/trap/basalt material, mixing by mix in place method by rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications including all lead and lift and as per the direction of Engineer in Charge	Cum	3239.55	2014.87	Rupees Two Thousand Fourteen And Paise Eighty Seven Only
15	Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications including all lead and lift and as per the direction of Engineer in Charge	Cum	3190.19	2021.29	Rupees Two Thousand Twenty One And Paise Twenty Nine Only

	Description of Work	Unit	Quantity as per Estimate	Rates	
				in figures	In Words
16	Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kgsqm using mechanical means complete as per specifications including all lead and lift and as per the direction of Engineer in Charge	Sqm	15950.96	34.26	Rupees Thirty Four And Paise Twenty Six Only
17	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications including all lead and lift and as per the direction of Engineer in Charge	Sqm	17385.67	12.85	Rupees Twelve And Paise Eighty Five Only
18	Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revision using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-14 Bitumen	Cum	824.75	7365.73	Rupees Seven Thousand Three Hundred Sixty Five And Paise Seventy Three Only
19	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using 40-60 TPH capacity HMP with sensor paver grading II (30-45mm) with 5.4% of modified bituminus binder consisting of 4.97% of VG-14 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) including all lead and lift and as per the direction of Engineer in Charge	Cum	695.43	8534.82	Rupees Eight Thousand Five Hundred Thirty Four And Paise Eighty Two Only
20	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications including all lead and lift and as per the direction of Engineer in Charge	Sqm	577.25	459.29	Rupees Four Hundred Fifty Nine And Paise Twenty Nine Only

Description of Work	Unit	Quantity as per Estimate	Rates	
			In figures	In Words
21 Supply and Installtion of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS(Acrylonitrile Butadiene Styrene) moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 16000 kg tested in accordance to Specifications of Category A of MORTH Circular No RW/ NH/33023/10-97 – DO III Dt 11.06. 1997. The height, width and length shall not exceed 50 mm, 100 mm and 102 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30 mm) from the body is to be a minimum value of 500 Kg. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturer's recommendation and complete as directed by the engineerincluding all lead and lift and as per the direction of Engineer in Charge	Nos	192.00	360.79	Rupees Three Hundred Sixty And Paise Seventy Nine Only
Above 125%	Nos	174.00	360.79	Rupees Three Hundred Sixty And Paise Seventy Nine Only
E1 KSRRB M600-1.Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @0.58cum over a prepared sub-base, coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1, Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. do- with OPC at 150 kg/cum and coarse aggregate 0.86cum, fine aggregate 0.58cum using Concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver. as per the direction of Engineer in Charge	Cum	845.56	4101.91	Rupees Four Thousand One Hundred One And Paise Ninety One Only

Description of Work	Unit	Quantity as per Estimate	Rates	
			In figures	In Words
E2 Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum, Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rakers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, including groove cutting charges, joint filler, separation membrane of impermeable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound as per the direction of Engineer in Charge	Cum	845.56	5690.65	Rupees Five Thousand Six Hundred Ninety And Paise Sixty Five Only


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